



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,493	02/05/2002	Lorraine E. Pena	C-3528/2/US	1201

26648 7590 06/29/2004

PHARMACIA CORPORATION
GLOBAL PATENT DEPARTMENT
POST OFFICE BOX 1027
ST. LOUIS, MO 63006

EXAMINER

YOUNG, MICAH PAUL

ART UNIT	PAPER NUMBER
----------	--------------

1615

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,493

Applicant(s)

PENA ET AL.

Examiner

Micah-Paul Young

Art Unit

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-22 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-22 and 24-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Acknowledgment of Papers Received: Request for Continued Examination along with Response filed 12/11/03.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 3-22, and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barbachyn et al (USPN 5,688,792), Borgulya et al (USPN 5,574,055), Kaplan et al (USPN 4,727,070), and Miyauchi (USPN 4,900,730).

Claims 1, and 3-20 are drawn to a composition comprising a, oxazolidinone in the form of a suppository, where the carrier is lipophilic. The claims recite the oxazolidinone's preferred structure. Subsequent claims limit the concentrations and species of the lipophilic carrier and the oxazolidinone. Claims 21, 22 and 24-29 are drawn to method of treating a gram-positive bacterial infection with the composition of claims 1 and 3-22. Subsequent claims limit the dosage regimen of the treatment.

Barbachyn et al discloses oxazolidinone antimicrobial compounds. The compounds have an identical structure to the compounds of the present invention (Abstract). The compounds of the reference can be formulated into capsules, dispersed granules and similar pharmaceutical

Art Unit: 1615

dosage forms (col. 6, lin. 45 – 65). Some of the carriers include lipophilic substances such as waxes, cocoa butter. What is lacking in the reference is an explicit disclosure of a rectal suppository, yet capsules are disclosed. These capsules could be manipulated within the level of skill in the art to be used rectally. It would be within the level of skill in the art to modify a capsule for rectal suppository administration.

Borgulya et al discloses a suppository formulation comprising an oxazolidinone antimicrobial agent (Example A). Though the active agent is a differing oxazolidinone agent, a skilled artisan would be able to substitute the compound of Barbachyn into that of Borgulya and expect the suppository to deliver the same antimicrobial effects as intended by Borgulya since the active agents are in the same class of compounds. The reference discloses that the active agents are

Kaplan et al discloses a suppository formulation comprising oxazolidinone compounds, where the lipophilic carrier is a hard fat (Example 7). Again the active agent differs from that of the claimed invention, but a skilled artisan would be able to substitute the oxazolidinone of Barbachyn into the formulation with an expectation of success since the compounds are in the same class and are used to a similar end.

With regard the to the particle size of the compound, the combination of micronized antibacterial agents, lipophilic carriers in a rectal suppository is well known in the art. Miyauchi discloses a rectal suppository where the active antibacterial agents (which are effective against gram-positive bacterial infections) are micronized from 1 – 50 microns, and dissolved in the hard fat Witpsol H-15 (col. 5 – 24 – 64; Examples). Though the particles of the reference fall within

Art Unit: 1615

a wide range, the micronizing of particles is well within the level of one of ordinary skill in the art.

The claims also recite that a further antibacterial agent is additionally included in the dosage form that also is effective against gram-positive bacterial infections. Though not explicitly taught by the cited references, it is obvious to combine like compounds. It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. The idea of combining them flows logically from their having been individually taught in the prior art. *See In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). It would have been obvious to combine any of the composition well known in the art to be affective against gram-positive bacterial infections (those taught by Miyauchi for instance), with any of the oxazolidinone compounds of the other cited reference.

With this in mind a skilled artisan would have been motivated to combine the teachings and suggestions of the art. A skilled artisan would be motivated to include the compounds of Barbachyn into any of the compositions of Borgulya. A skilled artisan would have included the hard fat of Kaplan. The skilled artisan would have followed the knowledge of micronizing antibacterial agents and combining them with hard fats into rectal suppositories shown in Miyauchi. It also would have been obvious to the artisan to include other antibacterial agents in order to increase the bacterial infection fighting power of the compound. This combination of teachings, compositions and suggestions would result in a rectal suppository comprising a hard fat (Witepsol W or H series), an oxazolidinone (Barbachyn) compound, and a further antibacterial agent, all of which would be effective in treating or preventing bacterial infections

Art Unit: 1615

resulting from gram-positive bacteria. A skilled artisan would be motivated to combine these teachings in order to provide a stable composition with effective pharmacokinetics to treat infection. A skilled artisan also would have been motivated by the antibacterial properties of the oxazolidinone compound to use this compound in a method to treat infections rectally including the compound of Barbachyn. It would have been obvious to combine the teachings, and suggestions as described here, at the time of the invention, with an expected result of a rectal suppository effective in treating bacterial infection.

Response to Arguments

1. Applicant's arguments filed 12/11/03 have been fully considered but they are not persuasive. Applicant argues against each reference individually and does not take the combination as a whole into consideration. .
2. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant points to shortcomings in Barbachyn, yet the reference is only relied upon for its disclosure of the structure of the oxazolidone compound and the dosage form of dispersed granules in a capsule. The reference suggests lipophilic carriers, and it would be within the level of skill in the art to modify this general description for oral or rectal administration. Borgulya is relied upon to show the level of skill in the art, that suppository formulations of oxazolidone compounds were well known in suppositories form. Kaplan is relied upon for its disclosure of oxazolidinone suppositories comprising hard fat carriers. Finally Miyauchi is merely relied upon

Art Unit: 1615

for its disclosure of micronized antibacterial formulations. These references are relied upon for specific teachings and do anticipate the instant invention individually, but taken as a whole render the instant claims obvious. It is the position of the examiner that a skilled artisan would be motivated to include the compounds of Barbachyn into any of the compositions of Borgulya. A skilled artisan would have included the hard fat of Kaplan. The skilled artisan would have followed the knowledge of micronizing antibacterial agents and combining them with hard fats into rectal suppositories shown in Miyauchi. It also would have been obvious to the artisan to include other antibacterial agents in order to increase the bacterial infection fighting power of the compound. This combination of teachings, compositions and suggestions would result in a rectal suppository comprising a hard fat (Witepsol W or H series), an oxazolidinone (Barbachyn) compound, and a further antibacterial agent, all of which would be effective in treating or preventing bacterial infections resulting from gram-positive bacteria. A skilled artisan would be motivated to combine these teachings in order to provide a stable composition with effective pharmacokinetics to treat infection. A skilled artisan also would have been motivated by the antibacterial properties of the oxazolidinone compound to use this compound in a method to treat infections rectally including the compound of Barbachyn. It would have been obvious to combine the teachings, and suggestions as described here, at the time of the invention, with an expected result of a rectal suppository effective in treating bacterial infection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Micah-Paul Young whose telephone number is 571-272-0608. The examiner can normally be reached on M-F 7:00-4:30 every other Monday off.

Application/Control Number: 10/072,493

Page 7

Art Unit: 1615

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Micah-Paul Young
Examiner
Art Unit 1615

MP Young

THURMAN K PAGE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600